

Taylor River Bridge and Dam Feasibility Study

Background

The I-95 bridge over the Taylor River in Hampton / Hampton Falls was built in 1949. Due to deterioration, the bridge needs to be rebuilt. A deteriorating dam and fishway are attached to the bridge. NH DOT is conducting a feasibility study that will recommend bridge, dam and fishway alternatives that address public safety and fish passage. This sheet describes the bridge and dam issues and the feasibility study.

Taylor River Bridge and Dam Issues

Public safety

The bridge carrying I-95 over the Taylor River has steel sheet pile abutment walls. These steel sheets are heavily rusted with small holes below the water line. The attached dam and fishway are both in poor condition and need to be replaced or removed.



Poor water quality

Nutrients from surrounding lands wash into the pond and cause excessive plant and algae growth. As the plants and algae grow and decay, they use up dissolved oxygen. Dissolved oxygen levels in the pond are low and in places are not adequate to support fish and other aquatic life.



Blocked fish passage

Historically, diadromous fish (i.e. river herring, eels, and smelt) used spawning and rearing habitat in the Taylor River. NH Fish and Game installed a fishway on the dam in the late 1960s. The fishway is deteriorating and does not attract fish effectively. Fish numbers have declined significantly in recent years compared to historical counts at this ladder.



Risk of flooding

During May 2006 storms, water held back by the Taylor River dam flooded property and threatened the interstate highway.



Gulf of Maine
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Taylor River Feasibility Study, Timeline, and Process

Feasibility study goal

The goal of the feasibility study is to propose and evaluate alternatives for the replacement of the I-95 bridge over the Taylor River and the attached dam and fishway. The study will propose alternatives that address transportation, public safety, flood management, water quality, and fish passage.

Feasibility study components

- Roadway geometry
- Traffic analysis
- Hydraulic / hydrologic analysis of the river
- Bridge scour analysis
- Bathymetric (depth) measurements in the impoundment and river
- Aquatic/fisheries resource assessment
- Wetland delineation
- Water quality survey
- Socioeconomic assessment
- Recreational use assessment
- Archaeological and historical assessments
- Bridge location alternatives
- Fish passage alternatives



Cost

The cost of the feasibility study is \$400,000. NH DOT - Turnpike, New Hampshire Estuaries Project, and the NOAA - Gulf of Maine Council Community Based Restoration Program are all financial contributors.



Project Partners

Partners include NH DOT, NH Coastal Program, NH Fish and Game, NH Department of Environmental Services, NH Estuaries Project, US Fish and Wildlife Service, NOAA, and the 22-member NH River Restoration Task Force. The Louis Berger Group, Inc. is conducting the feasibility study.

Timeline

The feasibility study began in fall of 2006. It will be completed in the summer of 2007. Bridge construction is anticipated to take place in 2010.

For more information about this project, please contact

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